Claims

1. Method of transferring user data packets from a terminal to a mainframe of an S-CDMA point to multi-point system, comprising the steps of a repeated transmission of a reference data packet coded with a pilot code for the duration of the connection between terminal and mainframe, wherein the reference data packet contains previously known information, and the sequential sending of user data packets coded with at least one communication code, which in each case comprise the user information to be transferred.

2. Method according to Claim 1, comprising the steps: each terminal is allocated a pilot code, at least for the duration of a connection, and each terminal is allocated at least one communication code at least for the duration of the transfer of a user data packet.

3. Method according to Claim 1 comprising the step: the coding of the reference data packet with the pilot code takes place synchronously in time to the coding of the user data packets with the at least one communication code.

4. Method according to Claim 3, comprising the step: from each reference data packet and user data packet or user data packets synchronously coded in time a summation signal is formed which, after subsequent modulation, is transmitted to the mainframe.

5. Method according to Claim 1, comprising the step: at the times at which a user data packet is being transmitted no reference data packet is transmitted.

6. Method according to Claim 1, wherein the pilot codes are CDMA codes and the communication codes are CDMA codes, wherein the pilot codes originate from a different CDMA code family from the communication codes and wherein no pilot code is identical to any communication code.

7. Method according to Claim 1, wherein the pilot codes are orthogonal to one another and the communication codes are orthogonal to one another.

8. Method according to Claim 1, wherein the pilot codes are not orthogonal to one another and the communication codes are orthogonal to one another.

9. Mainframe for an S-CDMA point to multi-point system for transferring user data packets from terminals to the mainframe, said mainframe being suitable for repeatedly receiving a reference data packet coded with a pilot code and containing previously known information on each connection to a terminal and for deriving synchronisation information from the signal of the reference data packet and the mainframe is suitable for receiving user data packets, coded with at least one communication code and comprising user information on each connection to a terminal.

10. Mainframe according to Claim 9, said the mainframe being suitable for deriving from the signal of the reference data packet information on the signal quality.

11. Mainframe according to Claim 9, comprising a control unit to allocate pilot codes and communication codes to terminals, wherein for each connection of a terminal to the mainframe a pilot code and at least one communication code at least for the duration of the transfer of a user data packet is assigned by the control unit.

12. Mainframe according to Claim 9, comprising at least one measuring unit to determine the signal-to-noise ratio for each connection to a terminal from the received pilot codes.

13. Mainframe according to Claim 9, comprising at least one measuring and control unit is provided to measure the signal levels of the received reference data packets and for telemetric regulation of the transmitting levels of the terminals for the reference data packets and/or the user data packets as a function of the measured signal levels.

14. Mainframe according to Claim 9, said mainframe being constructed as a base station for an LMDS system.

15. Transmitting device for an S-CDMA system, comprising a first coder for coding a reference data packet with a pilot code and a second coder for coding user data packets with at least one communication code are provided, wherein the reference data packet contains previously known information and the user data packets comprise the user information to be transferred and an adder is provided for adding the output signals of the coders.

16. Transmitting device according to Claim 15, comprising a modulator for HF modulation of the output signals of the adder.